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RADIOLOGICAL IMPACT ASSESSMENT
BROWNS FERRY NUCLEAR PLANT
JANUARY-JUNE 1982
TVA/OHS/RHS - 82/6

DIVISION OF OCCUPATIONAL HEALTH AND SAFETY

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Radiological Impact Assessment Browns Ferry Nuclear Plant.(Annual)

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August 1985

RADIOLOGICAL IMPACT ASSESSMENT
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Radiological Impact Assessment
Browns Ferry Nuclear Plant
January to June 1982

Introduction

Potential doses to individuals and populations have been calculated for the time period January through June in compliance with the requirements of Radiological Effluent Technical Specification 6.7.3.A. Dose calculations are based on Regulatory Guides 1.109, 1.111, and 1.113 to determine compliance with the dose objectives contained in 10 CFR 50 appendix I and 40 CFR 190. Measured plant releases (listed in tables 1-3 for radioactivity in both gaseous and liquid effluents) for the reporting period are used as input for the dose calculations. Dispersion of radioactive effluents in the environment has been calculated using meteorological data and river flow data measured during this period.

Meteorological Data

Meteorological data were measured, and average quarterly joint frequency distributions (JFDs) for ground-level, split-level, and stack releases were calculated. The ground-level JFD was derived from windspeeds and directions measured 10 meters above ground-level and from the vertical temperature gradient between 10 and 45 meters. The ground-level portion of the split-level JFD was based on windspeeds and directions measured with a sensor located 10 meters above ground level and from the vertical temperature gradient between 10 and 45 meters. The elevated portion of the split-level JFD was based on windspeeds and direction measurements at the 46-meter level and the vertical temperature gradient between 45 and 90 meters. The JFDs for elevated releases were based on wind directions and windspeeds measured at 93 meters. Stability class D was assumed to persist at the effluent release level of 175 meters for the entire period. For the period January 1, 1978 - December 31, 1980, stable conditions (E, F, or G stability) existed in the layer from 45 to 90 meters at BFN about 43 percent of the time. Neutral conditions existed about 56 percent of the time. This suggests that the use of a D stability for stack releases is conservative or realistic about 99 percent of the time. Also, temperature data taken between 110 and 275 meters at the Colbert Steam Plant during the spring and summer of 1976 indicated that for that layer stable conditions existed 53 percent of the time and neutral conditions existed 45 percent of the time. Thus, the 98 percent occurrence of stable or neutral conditions in the elevated layer at Colbert is comparable to the BFN upper layer percent. Although these data are limited to spring and summer, the small percentage of unstable conditions in the three-year data set suggests that the results are reasonable year round. For an elevated release, assumption of class D instead of E yields conservative results.

The windspeeds were divided into nine windspeed ranges. Calms (0-0.5 mph) were not distributed by direction. The quarterly JFDs are listed in tables 4 and 5 for ground-level releases, tables 6 and 7 for split-level releases, and in tables 8 and 9 for elevated releases.

Gaseous Effluents

Ground-level and elevated dispersion models were applied to turbine building and stack releases respectively. Releases from the reactor building

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and radwaste building were treated as split-level releases, i.e., partly elevated and partly ground-level. The split-level dispersion approach was implemented using a model that required for each effluent vent two complete average-annual JFDs, one for the elevated releases and one for the ground-level releases. Radionuclides in gaseous effluents were assumed to be released continuously. The generally open terrain around BFN is not believed to cause any significant effects on the transport and dispersion of gaseous effluents from the plant. Within 30 kilometers of BFN, the terrain is mostly gently rolling hills (30-60 meters). Between 30 and 80 kilometers, the hills become larger to the north and south, and mountainous to the east and northeast. Terrain may have a small effect on transport and dispersion during periods of southeasterly and southerly winds, overcast skies, and relatively high wind speeds. Then, the lower layer (10-45 meters) tends to be more stable than would be expected. However, during this infrequent condition, dose estimates will be conservative.

Dose estimates for external air exposures were made at and beyond the site boundary. External doses to the skin and total body were estimated for the nearest residence in each sector. Internal doses to organs were estimated from the ingestion, inhalation, and ground contamination exposure pathways. The internal doses were calculated for farms where milk is consumed without commercial preparation. Doses are given in tables 10 and 11 for these individual exposure pathways at the maximum exposure locations.

Population doses were calculated for an estimated 627,000 persons living within a 50-mile radius of the plant site. Population doses were calculated assuming that each individual consumes vegetables and meat produced within the sector annulus in which he resides. Doses from milk ingestion were calculated from data on milk production within 50 miles of the plant site. Doses from external pathways, inhalation, and beef and vegetable ingestion are based on the 50-mile human population distribution. Population dose estimates for the gaseous effluents are presented in Table 12.

Liquid Effluents

Doses from liquid effluents were calculated using measured hydraulic data. The average river flows at the plant site were 89,800 ft^3/s for the first quarter and 24,700 for the second quarter. Radioactivity concentrations in the Tennessee River were calculated assuming that releases in liquid effluents were continuous.

Doses were calculated for recreation, consumption of fish, and drinking water from public water supplies between the plant site and the mouth of the Tennessee River. The maximum individual dose from drinking water was assumed to be that calculated at the nearest downstream public water supply (Champion Paper Company). The maximum potential recreation dose was calculated for a location immediately downstream from the plant outfall. Dose estimates for the liquid effluents are presented in tables 13 and 14.

Direct Radiation

External gamma radiation levels were measured by thermoluminescent dosimeters (TLDs) deployed around Browns Ferry Nuclear Plant. The quarterly gamma radiation levels determined from these TLDs during this reporting period averaged approximately 19.8 mR/quarter at onsite stations and approximately 16.9 mR/quarter at offsite stations, or approximately 3 mR/quarter higher onsite

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than at offsite stations. This is consistent with levels reported at TVA's non-operating nuclear power plant construction sites where the average radiation levels onsite are generally 2-6 mR/quarter higher than the levels offsite. This may be attributable to natural variations in environmental radiation levels, earth moving activities onsite, the mass of concrete employed in the construction of the plants, or other undetermined influences. Fluctuations in natural background dose rates and in TLD readings tend to mask any small increments which may be due to plant operations. Thus, there was no identifiable increase in dose rate levels attributable to direct radiation from plant equipment and/or gaseous effluents.

Dose Summary

Doses calculated for this semiannual period result from the low-level effluent releases of units 1, 2, and 3. For gaseous effluents released in the first quarter, the maximum gamma and beta air doses were calculated to be 0.11 and 0.16 mrad, respectively. During the second quarter, the gamma and beta air doses were 0.33 and 0.52 mrad, respectively. These quarterly doses are well below the annual air dose guidelines (as specified in appendix I to 10 CFR 50) of 30 and 60 mrad for gamma and beta radiation, respectively, for three reactor units. The maximum doses from noble gases to the skin and total body during the first quarter were calculated to the 0.09 and 0.07 mrem. During the second quarter, the skin and total body were 0.23 and 0.17 mrem, respectively. The dose to the maximum exposed organ was 0.13 mrem to the bone for the first quarter and 0.11 mrem for the second quarter. These compare with annual dose guidelines of 45 mrem to the skin and maximum exposed organ and 15 mrem to the total body. These doses result from ingestion, inhalation, and ground contamination pathways and can be compared to a natural background radiation dose to an individual of about 90 mrem/yr.

For liquid effluents released in the first quarter, the maximum individual doses to the total body and the maximum exposed organ (i.e., liver) were calculated to be 0.11 and 0.13 mrem, respectively. In the second quarter, the maximum doses of the total body and liver were 0.06 and 0.07 mrem, respectively. These compare with annual dose guidelines as specified in appendix I to 10 CFR 50 of 9 and 30 mrem to the total body and maximum exposed organ, respectively, for three units.

Population doses from gaseous effluents during the first quarter were estimated to be 1.61 man-rem to the total body and 2.29 man-rem to the thyroid. For the second quarter, population doses were 2.87 man-rem to the total body and 3.07 man-rem to the thyroid. Population doses to bone are less than those to thyroid.

From liquid releases during the first quarter, the total population along the Tennessee River was estimated to receive 4.0 man-rem to the total body and 5.9 man-rem to the maximum exposed organ (liver). For the second quarter, the Tennessee River population was estimated to receive 2.7 man-rem to the total body and 3.8 man-rem to the maximum exposed organ (liver).

Population doses can be compared to the natural background dose to the 627,000 persons living within 50 miles of the plant of about 56,430 man-rem/yr. In summary, all doses calculated were below the guidelines of appendix I to CFR 50 and below the limits specified in the Browns Ferry Nuclear Plant Technical Specifications for plant operation.

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A tabulation for the quarterly doses over a five-year period is given in table 15.

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Table 1

BFN - Gaseous Effluent Releases

First Quarter 1982

	Radionuclide	Reactor Bldg (Ci)	Radwaste Bldg (Ci)	Turbine Bldg (Ci)	Stack (Ci)
1	TRITIUM	1.72E 00[a]	6.58E-02	1.67E-02	1.18E-01
2	AR-41	2.30E 01	1.09E 00	1.75E 00	3.28E 02
3	MN-54	2.82E-04	2.07E-05	5.10E-05	8.42E-05
4	FE-59	5.96E-04	4.51E-05	1.14E-04	1.32E-04
5	CO-58	2.68E-04	2.01E-05	5.15E-05	5.98E-05
6	CO-60	1.66E-04	1.33E-04	2.79E-04	1.14E-04
7	KR-85M	1.62E 01	7.41E-01	1.24E 00	2.21E-01
8	KR-85	1.41E 00	5.74E-02	2.12E-01	6.55E 02
9	KR-87	4.05E 01	1.86E 00	3.01E 00	7.51E 02
10	KR-88	3.48E 01	1.79E 00	3.12E 00	9.66E 03
11	SR-89	5.16E-05	2.81E-07	3.09E-06	9.07E-06
12	SR-90	8.24E-05	6.39E-07	8.27E-06	8.46E-07
13	ZR-95	5.92E-04	4.81E-05	1.14E-04	1.67E-03
14	NB-95	2.86E-04	2.18E-05	5.04E-05	6.09E-05
15	I-131	6.95E-04	9.65E-05	5.55E-05	2.89E-02
16	HI-131	6.95E-04	9.65E-05	5.55E-05	2.89E-02
17	I-133	6.00E-04	4.60E-05	2.75E-05	2.36E-03
18	HI-133	6.00E-04	4.60E-05	2.75E-05	2.36E-03
19	I-135	3.82E-03	2.53E-04	1.76E-04	1.83E-03
20	HI-135	3.82E-03	2.53E-04	1.76E-04	1.83E-03
21	XE-133	5.14E 01	1.18E 01	3.95E 00	1.22E 04
22	XE-133M	7.62E 01	3.12E 00	4.86E 00	3.20E 02
23	XE-135	2.18E 01	4.33E 00	1.16E 00	1.89E 02
24	XE-138	2.85E 02	1.31E 01	2.08E 00	1.77E 03
25	CS-134	3.61E-04	2.39E-05	6.29E-05	6.45E-05
26	CS-137	3.79E-04	5.86E-05	2.79E-05	6.96E-05
27	BA-140	3.62E-04	2.50E-05	7.20E-05	1.24E-04
28	LA-140	9.38E-04	5.43E-05	1.24E-04	3.49E-04

a. 1.72E 00 = 1.72×10^{0}

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Table 2

BFN - Gaseous Effluent Releases

Second Quarter 1982

	Radionuclide	Reactor Bldg (Ci)	Radwaste Bldg (Ci)	Turbine Bldg (Ci)	Stack (Ci)
1	TRITIUM	7.60E-02 [a]	1.44E 01	1.05E 00	1.77E-01
2	AR-41	1.28E 00	3.98E 01	1.28E 01	2.32E 02
3	MN-54	3.05E-05	4.41E-04	2.12E-04	1.10E-04
4	FE-59	6.36E-05	8.39E-04	9.13E-04	1.65E-04
5	CO-58	2.85E-05	4.31E-04	2.12E-04	8.82E-05
6	CO-60	1.54E-04	2.32E-03	9.32E-04	2.11E-04
7	KR-85M	9.30E-01	3.26E 01	1.27E 01	3.99E 03
8	KR-85	1.13E 00	3.88E 01	1.71E 01	9.63E 03
9	KR-87	2.33E 00	7.89E 01	2.36E 01	1.67E 03
10	KR-88	2.19E 00	7.59E 01	2.29E 01	1.82E 04
11	SR-89	1.25E-06	3.58E-05	3.63E-05	2.60E-05
12	SR-90	8.82E-07	3.47E-06	8.68E-06	6.89E-07
13	ZR-95	6.11E-05	9.74E-04	4.70E-04	7.48E-04
14	NB-95	2.97E-05	4.37E-04	2.10E-04	4.10E-04
15	XE-133	9.91E 00	9.66E 01	2.94E 01	1.86E 04
16	XE-135M	4.06E 00	2.89E 02	4.43E 01	1.34E 03
17	XE-135	5.48E 00	5.03E 01	1.02E 01	3.79E 02
18	XE-138	1.25E 01	6.15E 02	1.90E 02	1.40E 03
19	CS-134	3.53E-05	5.34E-04	2.52E-04	8.57E-05
20	CS-137	4.68E-05	7.79E-04	3.05E-04	9.51E-05
21	BA-140	3.74E-05	5.98E-04	2.60E-04	3.82E-04
22	LA-140	8.29E-05	1.47E-03	1.23E-03	8.02E-04
23	XE-133M	0.0	0.0	0.0	0.0
24	XE-131M	0.0	0.0	0.0	0.0
25	I-131	1.66E-05	8.05E-04	7.60E-04	9.55E-03
26	MI-131	1.66E-05	8.05E-04	7.60E-04	9.55E-03
27	I-133	7.00E-05	1.20E-03	8.85E-04	6.95E-03
28	MI-133	7.00E-05	1.20E-03	8.85E-04	6.95E-03
29	I-135	3.71E-04	5.90E-03	2.11E-03	3.84E-03
30	MI-135	3.71E-04	5.90E-03	2.11E-03	3.84E-03

a. 7.60E - 02 = 7.60×10^{-2}

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Table 3

BFN - Liquid Effluent Releases

Activity (μCi)

Nuclide	1st Quarter	2nd Quarter
H-3	8.2 E 6[a]	2.2 E 6
NA-24	6.0 E 4	6.7 E 3
CR-51	8.5 E 4	1.1 E 4
MN-54	8.8 E 4	2.4 E 3
MN-56	2.8 E 5	1.5 E 3
FE-59	1.6 E 5	1.8 E 4
CO-58	1.3 E 4	1.5 E 3
CO-60	1.4 E 6	3.1 E 4
CU-64	8.6 E 5	2.5 E 4
ZN-65	5.9 E 5	6.5 E 4
BR-82	6.8 E 4	2.2 E 3
SR-89	3.3 E 3	1.4 E 3
SR-90	3.5 E 2	2.1 E 2
ZR-95	1.8 E 4	1.4 E 3
NB-95	1.8 E 4	1.4 E 3
MO-99	4.4 E 3	4.1 E 2
TC-99M	4.1 E 3	4.1 E 2
AG-110M	1.4 E 5	3.2 E 3
SB-124	8.5 E 3	1.1 E 3
SB-125	4.3 E 4	1.4 E 3
I-131	7.7 E 4	4.9 E 3
I-133	3.8 E 4	1.9 E 3
I-135	6.9 E 3	3.6 E 3
XE-133	2.5 E 5	5.9 E 3
XE-135	1.2 E 5	4.1 E 3
CS-134	6.0 E 4	1.3 E 4
CS-136	6.8 E 3	1.2 E 3
CS-137	8.4 E 4	1.9 E 4
BA-140	2.6 E 3	2.9 E 2
LA-140	2.6 E 3	2.9 E 2
CE-141	1.3 E 4	2.7 E 3
SM-153	1.1 E 4	2.4 E 3
Total	1.3 E 7	2.4 E 6

[a] 8.2 E 6 = 8.2×10^6

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Table 4

[redacted] - Meteorological Data
Ground-level Joint Frequency Distribution in Percent

First Quarter 1982

STABILITY CLASS A

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.140	0.239	0.140	0.0	0.519
NNE	0.0	0.0	0.0	0.0	0.0	0.239	0.239	0.0	0.0	0.478
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.050
SE	0.0	0.0	0.0	0.100	0.289	0.189	0.0	0.0	0.0	0.578
SSE	0.0	0.0	0.0	0.618	0.528	0.100	0.0	0.0	0.0	1.246
S	0.0	0.0	0.0	0.329	0.050	0.0	0.0	0.0	0.0	0.379
SSW	0.0	0.0	0.0	0.100	0.143	0.0	0.0	0.0	0.0	0.239
SW	0.0	0.0	0.0	0.0	0.100	0.0	0.0	0.0	0.0	0.100
WSW	0.0	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.050
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.100	0.379	0.0	0.0	0.479
NNW	0.0	0.0	0.0	0.0	0.0	0.100	0.478	0.0	0.0	0.578
TOTALS	0.0	0.0	0.0	1.146	1.208	0.887	1.336	0.140	0.0	4.695

STABILITY CLASS B

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.050	0.050	0.100	0.0	0.0	0.199
NNE	0.0	0.0	0.0	0.0	0.189	0.239	0.239	0.0	0.0	0.468
NE	0.0	0.0	0.0	0.0	0.0	0.100	0.0	0.0	0.0	0.100
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.050
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.050	0.100	0.100	0.050	0.0	0.0	0.0	0.299
SSE	0.0	0.0	0.100	0.100	0.0	0.0	0.0	0.0	0.0	0.199
S	0.0	0.0	0.0	0.329	0.050	0.0	0.0	0.0	0.0	0.379
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.050	0.143	0.050	0.0	0.0	0.0	0.239
W	0.0	0.0	0.0	0.0	0.0	0.100	0.0	0.0	0.0	0.100
WNW	0.0	0.0	0.0	0.0	0.0	0.189	0.100	0.0	0.0	0.289
NW	0.0	0.0	0.0	0.0	0.0	0.100	0.100	0.050	0.0	0.249
NNW	0.0	0.0	0.0	0.0	0.0	0.100	0.189	0.0	0.0	0.289
TOTALS	0.0	0.0	0.150	0.628	0.528	0.977	0.728	0.050	0.0	3.060

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Table 4 (Cont'd)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.100	0.189	0.189	0.189	0.100	0.0	0.0	0.768
NNE	0.0	0.0	0.0	0.140	0.189	0.329	0.050	0.0	0.0	0.708
NE	0.0	0.0	0.0	0.090	0.050	0.189	0.050	0.0	0.0	0.339
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.100	0.0	0.0	0.0	0.0	0.100
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.050	0.100	0.050	0.0	0.0	0.0	0.0	0.199
SSE	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.050
S	0.0	0.0	0.050	0.140	0.0	0.0	0.0	0.0	0.0	0.189
SSW	0.0	0.0	0.0	0.100	0.0	0.0	0.0	0.0	0.0	0.100
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.100	0.0	0.0	0.0	0.100
W	0.0	0.0	0.0	0.050	0.100	0.050	0.0	0.0	0.0	0.199
WNW	0.0	0.0	0.0	0.0	0.050	0.150	0.239	0.050	0.0	0.439
NW	0.0	0.0	0.0	0.0	0.050	0.0	0.050	0.0	0.0	0.100
NNW	0.0	0.0	0.0	0.0	0.0	0.140	0.140	0.0	0.0	0.279
TOTALS	0.0	0.0	0.199	0.817	0.778	1.096	0.628	0.050	0.0	3.569

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.59	13.00	TOTALS
N	0.012	0.100	0.478	0.768	0.708	2.372	1.764	0.100	0.0	6.301
NNE	0.0	0.0	0.328	0.618	1.085	2.153	0.907	0.0	0.0	5.343
NE	0.006	0.050	0.379	0.478	0.718	1.473	0.329	0.0	0.0	3.425
ENE	0.006	0.050	0.239	0.289	0.140	0.239	0.0	0.0	0.0	0.763
E	0.0	0.0	0.289	0.289	0.429	0.328	0.0	0.0	0.0	1.335
ESE	0.006	0.050	0.289	0.568	0.668	0.100	0.0	0.0	0.0	1.681
SE	0.006	0.050	0.807	0.528	0.429	0.239	0.0	0.0	0.0	2.059
SSE	0.0	0.0	0.718	0.947	0.140	0.239	0.0	0.0	0.0	2.053
S	0.006	0.050	0.329	0.718	0.050	0.100	0.050	0.0	0.0	1.302
SSW	0.0	0.0	0.100	0.289	0.140	0.0	0.0	0.0	0.0	0.529
SW	0.0	0.0	0.289	0.050	0.050	0.0	0.0	0.0	0.0	0.389
WSW	0.0	0.0	0.289	0.189	0.239	0.568	0.100	0.0	0.0	1.386
W	0.0	0.0	0.189	0.289	0.379	0.289	0.429	0.050	0.0	1.625
WNW	0.0	0.0	0.100	0.239	0.429	0.289	1.067	0.140	0.0	2.911
NW	0.006	0.050	0.050	0.478	0.568	1.148	0.718	0.0	0.0	3.016
NNW	0.0	0.0	0.140	0.239	0.618	3.050	1.285	0.100	0.0	5.433
TOTALS	0.048	0.399	5.213	6.988	8.858	15.696	8.629	0.389	0.0	40.219

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Table 4 (Cont'd)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.83	4.45	6.91	9.59	13.00	TOTALS
N	0.004	0.050	0.189	0.289	0.239	0.429	0.0	0.0	0.0	1.209
NNE	0.0	0.0	0.140	0.528	0.050	0.528	0.100	0.0	0.0	1.346
NE	0.015	0.189	0.329	0.289	0.478	0.239	0.0	0.0	0.0	1.540
ENE	0.026	0.329	0.568	0.429	0.239	0.050	0.0	0.0	0.0	1.661
E	0.008	0.100	0.328	0.289	0.100	0.0	0.0	0.0	0.0	1.015
ESE	0.0	0.0	0.329	0.907	0.329	0.050	0.0	0.0	0.0	1.615
SE	0.015	0.169	1.336	1.196	0.957	0.668	0.0	0.0	0.0	4.341
SSE	0.008	0.100	0.618	0.618	0.429	0.718	0.050	0.0	0.0	2.540
S	0.004	0.050	0.379	0.618	0.768	1.904	0.100	0.0	0.0	3.822
SSW	0.004	0.050	0.379	0.429	0.239	0.329	0.0	0.0	0.0	1.429
SW	0.004	0.050	0.189	0.239	0.050	0.0	0.0	0.0	0.0	0.532
WSW	0.0	0.0	0.329	0.189	0.143	0.718	0.050	0.0	0.0	1.429
W	0.004	0.050	0.379	0.528	0.478	0.189	0.050	0.0	0.0	1.679
WNW	0.004	0.050	0.140	0.289	0.239	0.100	0.050	0.0	0.0	0.871
NW	0.0	0.0	0.140	0.050	0.189	0.478	0.100	0.0	0.0	0.957
NNW	0.0	0.0	0.140	0.289	0.189	0.478	0.140	0.0	0.0	1.236
TOTALS	0.096	1.206	6.110	7.177	5.114	8.878	0.638	0.0	0.0	27.219

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.83	4.45	6.91	9.59	13.00	TOTALS
N	0.003	0.050	0.050	0.0	0.100	0.0	0.0	0.0	0.0	0.203
NNE	0.0	0.0	0.189	0.140	0.100	0.0	0.0	0.0	0.0	0.429
NE	0.003	0.050	0.189	0.140	0.050	0.100	0.0	0.0	0.0	0.531
ENE	0.0	0.0	0.289	0.289	0.0	0.0	0.0	0.0	0.0	0.579
E	0.003	0.050	0.768	0.239	0.0	0.0	0.0	0.0	0.0	1.060
ESE	0.003	0.050	0.478	0.050	0.0	0.0	0.0	0.0	0.0	0.581
SE	0.022	0.379	1.525	1.286	0.528	0.289	0.0	0.0	0.0	4.029
SSE	0.004	0.100	0.957	0.857	0.283	0.768	0.100	0.0	0.0	3.074
S	0.004	0.100	0.429	0.568	0.907	0.668	0.050	0.0	0.0	2.727
SSW	0.003	0.050	0.239	0.100	0.050	0.050	0.0	0.0	0.0	0.491
SW	0.0	0.0	0.239	0.0	0.050	0.0	0.0	0.0	0.0	0.289
WSW	0.0	0.0	0.140	0.0	0.050	0.050	0.0	0.0	0.0	0.239
W	0.0	0.0	0.100	0.050	0.0	0.0	0.0	0.0	0.0	0.150
WNW	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
NW	0.0	0.0	0.050	0.0	0.189	0.0	0.0	0.0	0.0	0.239
NNW	0.0	0.0	0.189	0.289	0.050	0.0	0.0	0.0	0.0	0.528
TOTALS	0.049	0.827	5.881	4.067	2.362	1.924	0.150	0.0	0.0	15.200

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Table 4 (Cont'd)

STABILITY CLASS 5

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.89	4.49	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.189	0.0	0.0	0.0	0.0	0.0	0.0	0.189
NNE	0.0	0.050	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.150
NE	0.0	0.0	0.050	0.050	0.0	0.0	0.0	0.0	0.0	0.100
ENE	0.0	0.0	0.050	0.050	0.0	0.0	0.0	0.0	0.0	0.100
E	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.050
ESE	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
SE	0.0	0.0	0.328	0.050	0.143	0.100	0.0	0.0	0.0	0.817
SSE	0.0	0.050	1.236	0.997	0.528	0.239	0.0	0.0	0.0	3.010
S	0.0	0.0	0.429	0.818	0.329	0.150	0.0	0.0	0.0	1.473
SSW	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
TOTALS	0.0	0.100	2.731	1.774	0.997	0.439	0.0	0.0	0.0	6.041

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Table 5

BFN - Meteorological Data
Ground-level Joint Frequency Distribution in Percent

Second Quarter 1982

STABILITY CLASS A

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0-13	0.49	1.10	1.99	2.85	4.49	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.050	0.050	0.329	0.190	0.0	0.0	0.619
NNE	0.0	0.0	0.0	0.0	0.050	0.050	0.279	0.050	0.0	0.529
NE	0.0	0.0	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.050
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.140	1.287	0.289	0.0	0.0	0.0	0.0	1.666
SSE	0.0	0.0	0.100	0.469	0.050	0.0	0.0	0.0	0.0	0.618
S	0.0	0.0	0.100	0.379	0.190	0.050	0.0	0.0	0.0	0.718
SSW	0.0	0.0	0.0	0.140	0.050	0.0	0.0	0.0	0.0	0.190
SW	0.0	0.0	0.0	0.100	0.050	0.0	0.0	0.0	0.0	0.150
WSW	0.0	0.0	0.0	0.050	0.289	0.0	0.0	0.0	0.0	0.339
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.050	0.100	0.0	0.0	0.150
NW	0.0	0.0	0.0	0.0	0.0	0.140	0.050	0.0	0.0	0.190
NNW	0.0	0.0	0.0	0.0	0.0	0.329	0.050	0.0	0.0	0.379
TOTALS	0.0	0.0	0.339	2.824	1.018	0.998	0.768	0.050	0.0	5.797

STABILITY CLASS B

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.49	1.10	1.99	2.85	4.49	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.100	0.050	0.239	0.050	0.0	0.0	0.439
NNE	0.0	0.0	0.0	0.0	0.100	0.100	0.100	0.0	0.0	0.299
NE	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.050
ENE	0.0	0.0	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.050
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.050	0.329	0.0	0.050	0.0	0.0	0.0	0.429
SSE	0.0	0.0	0.140	0.239	0.0	0.0	0.0	0.0	0.0	0.379
S	0.0	0.0	0.100	0.479	0.050	0.050	0.0	0.0	0.0	0.479
SSW	0.0	0.0	0.100	0.100	0.190	0.0	0.0	0.0	0.0	0.389
SW	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.050
WSW	0.0	0.0	0.0	0.050	0.190	0.0	0.0	0.0	0.0	0.239
W	0.0	0.0	0.0	0.0	0.050	0.0	0.0	0.050	0.0	0.100
WNW	0.0	0.0	0.0	0.0	0.050	0.050	0.050	0.140	0.0	0.288
NW	0.0	0.0	0.0	0.0	0.050	0.100	0.0	0.0	0.0	0.150
NNW	0.0	0.0	0.0	0.0	0.0	0.239	0.050	0.0	0.0	0.289
TOTALS	0.0	0.0	0.389	1.907	0.728	0.878	0.249	0.190	0.0	3.832

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Table 5 (Cont'd)

STABILITY CLASS C

WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED

SECTOR	0.13	0.45	1.10	1.99	2.85	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.050	0.100	0.239	0.140	0.0	0.0	0.529
NNE	0.0	0.0	0.0	0.100	0.140	0.100	0.100	0.0	0.0	0.439
NE	0.0	0.0	0.0	0.050	0.050	0.329	0.0	0.0	0.0	0.429
ENE	0.0	0.0	0.0	0.0	0.0	0.100	0.0	0.0	0.0	0.100
E	0.0	0.0	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.050
ESE	0.0	0.0	0.0	0.050	0.050	0.0	0.0	0.0	0.0	0.100
SE	0.0	0.0	0.140	0.329	0.140	0.0	0.0	0.0	0.0	0.609
SSE	0.0	0.0	0.100	0.100	0.0	0.100	0.0	0.0	0.0	0.299
S	0.0	0.0	0.190	0.519	0.140	0.0	0.0	0.0	0.0	0.848
SSW	0.0	0.0	0.050	0.050	0.0	0.0	0.0	0.0	0.0	0.100
SW	0.0	0.0	0.100	0.289	0.050	0.0	0.0	0.0	0.0	0.439
WSW	0.0	0.0	0.0	0.239	0.190	0.050	0.0	0.0	0.0	0.479
W	0.0	0.0	0.0	0.050	0.190	0.239	0.0	0.0	0.0	0.479
WNW	0.0	0.0	0.0	0.140	0.050	0.239	0.0	0.140	0.0	0.569
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.100	0.379	0.0	0.0	0.0	0.479
TOTALS	0.0	0.0	0.579	1.966	1.197	1.826	0.239	0.140	0.0	5.947

STABILITY CLASS D

WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED

SECTOR	0.13	0.45	1.10	1.99	2.85	4.45	6.91	9.59	13.00	TOTALS
N	0.004	0.050	0.0	0.479	0.718	1.147	0.239	0.0	0.0	2.638
NNE	0.004	0.050	0.140	0.479	0.429	0.808	0.329	0.050	0.0	2.299
NE	0.0	0.0	0.239	0.329	0.519	0.669	0.0	0.0	0.0	1.756
ENE	0.004	0.050	0.239	0.379	0.429	0.429	0.050	0.0	0.0	1.581
E	0.0	0.0	0.329	0.329	0.193	0.100	0.0	0.0	0.0	0.948
ESE	0.004	0.050	0.190	0.140	0.619	0.140	0.0	0.0	0.0	1.141
SE	0.008	0.100	3.333	2.614	0.948	0.429	0.0	0.0	0.0	7.432
SSE	0.004	0.100	1.764	0.758	0.568	0.140	0.0	0.0	0.0	3.332
S	0.0	0.0	1.187	1.856	0.808	0.479	0.0	0.0	0.0	4.331
SSW	0.0	0.0	0.758	0.808	0.190	0.050	0.0	0.0	0.0	1.806
SW	0.0	0.0	0.479	0.569	0.140	0.0	0.0	0.0	0.0	1.187
WSW	0.004	0.050	0.998	1.327	0.948	0.100	0.0	0.0	0.0	3.626
W	0.007	0.100	0.289	0.289	0.998	0.718	0.050	0.050	0.0	2.502
WNW	0.0	0.0	0.140	0.429	0.569	0.718	0.329	0.0	0.0	2.185
NW	0.004	0.050	0.050	0.050	0.050	0.100	0.289	0.050	0.050	0.692
NNW	0.0	0.0	0.050	0.239	0.190	0.479	0.479	0.140	0.0	1.577
TOTALS	0.045	0.599	10.189	11.273	8.312	6.806	1.786	0.289	0.050	39.029

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Table 5 (Cont'd)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.80	4.48	8.91	9.59	13.00	
N	0.0	0.0	0.479	0.519	0.519	0.429	0.0	0.0	0.0	1.946
NNE	0.009	0.100	0.289	0.619	0.289	0.389	0.080	0.0	0.0	1.685
NE	0.012	0.140	0.379	0.379	0.379	0.190	0.0	0.0	0.0	1.479
ENE	0.012	0.140	1.377	0.479	0.193	0.080	0.0	0.0	0.0	2.267
E	0.004	0.050	0.718	0.379	0.093	0.0	0.0	0.0	0.0	1.201
ESE	0.0	0.0	1.187	0.379	0.193	0.0	0.0	0.0	0.0	1.664
SE	0.039	0.429	2.804	1.648	0.569	0.0	0.0	0.0	0.0	4.888
SSE	0.026	0.289	1.567	0.908	0.100	0.0	0.0	0.0	0.0	2.890
S	0.016	0.190	1.048	0.379	0.329	0.429	0.190	0.0	0.0	2.586
SSW	0.012	0.140	0.669	0.100	0.050	0.140	0.0	0.0	0.0	1.110
SW	0.0	0.0	0.239	0.0	0.0	0.0	0.0	0.0	0.0	0.239
WSW	0.009	0.100	0.908	0.619	0.050	0.050	0.100	0.0	0.0	1.833
W	0.0	0.0	0.329	0.718	0.329	0.050	0.050	0.0	0.0	1.477
WNW	0.0	0.0	0.0	0.140	0.190	0.050	0.0	0.0	0.0	0.379
NW	0.0	0.0	0.0	0.0	0.050	0.050	0.050	0.0	0.0	0.150
NNW	0.0	0.0	0.140	0.329	0.329	0.379	0.100	0.0	0.0	1.277
TOTALS	0.139	1.377	12.133	6.995	3.522	2.148	0.539	0.0	0.0	27.050

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									TOTALS
	0.13	0.45	1.10	1.99	2.80	4.48	8.91	9.59	13.00	
N	0.021	0.190	0.669	0.519	0.140	0.0	0.0	0.0	0.0	1.538
NNE	0.037	0.329	0.758	0.948	0.479	0.050	0.0	0.0	0.0	2.601
NE	0.026	0.239	0.289	0.329	0.053	0.050	0.0	0.0	0.0	0.986
ENE	0.021	0.190	0.619	0.379	0.050	0.0	0.0	0.0	0.0	1.258
E	0.0	0.0	0.658	0.289	0.0	0.0	0.0	0.0	0.0	1.147
ESE	0.015	0.140	0.379	0.050	0.0	0.0	0.0	0.0	0.0	0.584
SE	0.037	0.329	1.377	0.050	0.103	0.0	0.0	0.0	0.0	1.893
SSE	0.011	0.100	0.190	0.100	0.100	0.0	0.0	0.0	0.0	0.500
S	0.0	0.0	0.190	0.050	0.193	0.140	0.100	0.0	0.0	0.669
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.100
WSW	0.0	0.0	0.140	0.0	0.0	0.0	0.0	0.0	0.0	0.140
W	0.005	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.055
WNW	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.011	0.100	0.050	0.190	0.053	0.0	0.0	0.0	0.0	0.400
TOTALS	0.184	1.666	5.668	2.904	1.197	0.239	0.100	0.0	0.0	11.918

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Table 5 (Cont'd)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.80	4.45	8.91	9.39	13.00	TOTALS
N	0.028	0.140	0.519	0.289	0.140	0.0	0.0	0.0	0.0	1.116
NNE	0.048	0.239	0.758	0.758	0.239	0.0	0.0	0.0	0.0	2.044
NE	0.028	0.140	0.329	0.050	0.0	0.0	0.0	0.0	0.0	0.547
ENE	0.010	0.050	0.619	0.190	0.050	0.0	0.0	0.0	0.0	0.918
E	0.020	0.100	0.190	0.669	0.0	0.0	0.0	0.0	0.0	0.978
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.020	0.100	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.220
SSE	0.020	0.100	0.140	0.100	0.0	0.0	0.0	0.0	0.0	0.359
S	0.010	0.050	0.0	0.140	0.0	0.0	0.0	0.0	0.0	0.200
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
TOTALS	0.184	0.918	2.704	2.195	0.429	0.0	0.0	0.0	0.0	6.430

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Table 6

BFN - Meteorological Data
Split-level Joint Frequency Distribution in Percent
Ground-level Portion

First Quarter 1982

STABILITY CLASS A

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.85	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.010	0.050	0.110	0.0	0.170
NNE	0.0	0.0	0.0	0.0	0.0	0.020	0.040	0.0	0.0	0.060
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.030	0.030	0.0	0.0	0.0	0.060
SSE	0.0	0.0	0.0	0.030	0.080	0.020	0.0	0.0	0.0	0.130
S	0.0	0.0	0.0	0.030	0.010	0.0	0.0	0.0	0.0	0.040
SSW	0.0	0.0	0.0	0.010	0.020	0.0	0.0	0.0	0.0	0.030
SW	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.010
WSW	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.010
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.010	0.090	0.0	0.0	0.100
NNW	0.0	0.0	0.0	0.0	0.0	0.010	0.100	0.0	0.0	0.110
TOTALS	0.0	0.0	0.0	0.070	0.160	0.100	0.280	0.110	0.0	0.720

STABILITY CLASS B

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.85	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.010	0.030	0.040	0.0	0.0	0.080
NNE	0.0	0.0	0.0	0.0	0.010	0.070	0.060	0.0	0.0	0.140
NE	0.0	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.010
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.010	0.010	0.0	0.0	0.0	0.020
SSE	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.010
S	0.0	0.0	0.0	0.020	0.010	0.0	0.0	0.0	0.0	0.030
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.010	0.010	0.0	0.0	0.0	0.020
W	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.020
WNW	0.0	0.0	0.0	0.0	0.0	0.030	0.040	0.040	0.0	0.110
NW	0.0	0.0	0.0	0.0	0.0	0.020	0.020	0.030	0.0	0.070
NNW	0.0	0.0	0.0	0.0	0.0	0.030	0.070	0.0	0.0	0.100
TOTALS	0.0	0.0	0.0	0.030	0.050	0.230	0.230	0.070	0.0	0.610

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Table 6 (Cont'd)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.83	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.010	0.020	0.020	0.0	0.0	0.050
NNE	0.0	0.0	0.0	0.0	0.010	0.040	0.020	0.0	0.0	0.070
NE	0.0	0.0	0.0	0.0	0.0	0.030	0.010	0.0	0.0	0.040
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.010	0.010	0.010	0.0	0.0	0.0	0.030
SSE	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.010
S	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.010
SSW	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.010
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.020
W	0.0	0.0	0.0	0.0	0.010	0.010	0.0	0.0	0.0	0.020
WNW	0.0	0.0	0.0	0.0	0.0	0.010	0.040	0.0	0.0	0.050
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.020
NNW	0.0	0.0	0.0	0.0	0.0	0.010	0.030	0.0	0.0	0.040
TOTALS	0.0	0.0	0.0	0.040	0.040	0.150	0.140	0.0	0.0	0.370

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.83	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.010	0.060	0.390	0.430	0.070	0.0	0.959
NNE	0.0	0.0	0.0	0.010	0.080	0.320	0.220	0.0	0.0	0.630
NE	0.0	0.0	0.0	0.010	0.060	0.220	0.070	0.0	0.0	0.360
ENE	0.0	0.0	0.0	0.010	0.020	0.030	0.0	0.0	0.0	0.060
E	0.0	0.0	0.0	0.010	0.050	0.090	0.0	0.0	0.0	0.150
ESE	0.0	0.0	0.0	0.030	0.080	0.010	0.0	0.0	0.0	0.120
SE	0.0	0.0	0.0	0.090	0.080	0.050	0.0	0.0	0.0	0.180
SSE	0.0	0.0	0.010	0.070	0.030	0.070	0.0	0.0	0.0	0.180
S	0.0	0.0	0.010	0.080	0.010	0.020	0.040	0.0	0.0	0.160
SSW	0.0	0.0	0.0	0.030	0.020	0.0	0.0	0.0	0.0	0.050
SW	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.010
WSW	0.0	0.0	0.0	0.010	0.040	0.100	0.020	0.0	0.0	0.170
W	0.0	0.0	0.0	0.010	0.030	0.040	0.230	0.040	0.0	0.350
WNW	0.0	0.0	0.0	0.0	0.020	0.140	0.230	0.080	0.0	0.470
NW	0.0	0.0	0.0	0.010	0.060	0.170	0.170	0.0	0.0	0.410
NNW	0.0	0.0	0.0	0.010	0.050	0.310	0.340	0.070	0.0	0.979
TOTALS	0.0	0.0	0.020	0.380	0.700	2.159	1.749	0.260	0.0	5.236

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Table 6 (Cont'd)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.020	0.030	0.100	0.0	0.0	0.0	0.150
NNE	0.0	0.0	0.0	0.040	0.0	0.090	0.020	0.0	0.0	0.150
NE	0.0	0.0	0.010	0.030	0.060	0.050	0.0	0.0	0.0	0.150
ENE	0.0	0.0	0.010	0.040	0.030	0.010	0.0	0.0	0.0	0.090
E	0.0	0.0	0.010	0.020	0.010	0.0	0.0	0.0	0.0	0.040
ESE	0.0	0.0	0.010	0.090	0.050	0.010	0.0	0.0	0.0	0.160
SE	0.0	0.0	0.050	0.130	0.150	0.150	0.0	0.0	0.0	0.480
SSE	0.0	0.0	0.020	0.080	0.100	0.520	0.050	0.0	0.0	0.769
S	0.0	0.0	0.030	0.080	0.140	0.769	0.070	0.0	0.0	1.089
SSW	0.0	0.0	0.010	0.070	0.050	0.100	0.0	0.0	0.0	0.230
SW	0.0	0.0	0.010	0.030	0.010	0.0	0.0	0.0	0.0	0.050
WSW	0.0	0.0	0.010	0.020	0.020	0.150	0.060	0.0	0.0	0.260
W	0.0	0.0	0.020	0.040	0.060	0.040	0.030	0.0	0.0	0.190
WNW	0.0	0.0	0.0	0.020	0.020	0.030	0.030	0.0	0.0	0.100
NW	0.0	0.0	0.0	0.0	0.020	0.100	0.060	0.0	0.0	0.180
NNW	0.0	0.0	0.0	0.020	0.020	0.090	0.060	0.0	0.0	0.190
TOTALS	0.0	0.0	0.190	0.730	0.769	2.268	0.380	0.0	0.0	4.337

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.010
NNE	0.0	0.0	0.0	0.010	0.010	0.0	0.0	0.0	0.0	0.020
NE	0.0	0.0	0.0	0.010	0.010	0.020	0.0	0.0	0.0	0.040
ENE	0.0	0.0	0.010	0.030	0.0	0.0	0.0	0.0	0.0	0.040
E	0.0	0.0	0.020	0.010	0.0	0.0	0.0	0.0	0.0	0.030
ESE	0.0	0.0	0.020	0.010	0.0	0.0	0.0	0.0	0.0	0.030
SE	0.0	0.010	0.080	0.190	0.110	0.190	0.0	0.0	0.0	0.580
SSE	0.0	0.010	0.050	0.160	0.110	0.390	0.100	0.0	0.0	0.949
S	0.0	0.0	0.030	0.080	0.180	0.310	0.040	0.0	0.0	0.640
SSW	0.0	0.0	0.020	0.020	0.010	0.020	0.0	0.0	0.0	0.070
SW	0.0	0.0	0.010	0.0	0.010	0.0	0.0	0.0	0.0	0.020
WSW	0.0	0.0	0.010	0.0	0.010	0.010	0.0	0.0	0.0	0.030
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.030	0.0	0.0	0.0	0.0	0.030
NNW	0.0	0.0	0.010	0.030	0.010	0.0	0.0	0.0	0.0	0.050
TOTALS	0.0	0.020	0.260	0.530	0.500	1.089	0.140	0.0	0.0	2.538

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Table 6 (Cont'd)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.010
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.050	0.010	0.050	0.050	0.0	0.0	0.0	0.160
SSE	0.0	0.010	0.150	0.180	0.160	0.220	0.0	0.0	0.0	0.720
S	0.0	0.0	0.050	0.110	0.070	0.060	0.0	0.0	0.0	0.290
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS	0.0	0.010	0.250	0.310	0.280	0.330	0.0	0.0	0.0	1.179

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Table 6 (Cont'd)

Elevated Portion of Split-level JFD

STABILITY CLASS A

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.83	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

STABILITY CLASS B

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.83	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.050
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.040	0.0	0.0	0.0	0.0	0.040
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS	0.0	0.0	0.050	0.0	0.090	0.0	0.0	0.0	0.0	0.140

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Table 6 (Cont'd)

STABILITY CLASS C

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.85	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.050	0.0	0.0	0.090	0.0	0.0	0.0	0.140
SSE	0.0	0.0	0.0	0.050	0.100	0.040	0.0	0.0	0.0	0.190
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
SW	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.0	0.0	0.040
WSW	0.0	0.0	0.0	0.0	0.0	0.040	0.040	0.0	0.0	0.080
W	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.020	0.0	0.060
WNW	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.050	0.0	0.090
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.0	0.040
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.040	0.030	0.0	0.070
TOTALS	0.0	0.0	0.100	0.050	0.100	0.290	0.120	0.100	0.0	0.759

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.85	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.140	0.759	0.733	1.840	2.528	0.500	0.010	6.516
NNE	0.0	0.0	0.430	0.480	1.229	2.678	1.939	0.380	0.0	7.139
NE	0.0	0.0	0.140	0.480	0.779	1.439	0.899	0.030	0.0	3.767
ENE	0.0	0.0	0.190	0.190	0.279	0.350	0.120	0.0	0.0	1.319
E	0.0	0.0	0.290	0.480	0.329	0.540	0.200	0.0	0.0	1.829
ESE	0.0	0.0	0.100	0.480	0.230	1.049	0.040	0.0	0.0	1.899
SE	0.0	0.050	0.620	0.720	0.329	1.249	0.740	0.090	0.0	3.797
SSE	0.0	0.0	0.290	0.480	0.149	0.909	0.819	0.380	0.0	3.218
S	0.0	0.050	0.140	0.140	0.379	1.029	1.039	0.740	0.020	3.524
SSW	0.0	0.0	0.100	0.100	0.189	0.350	0.620	0.450	0.020	2.019
SW	0.0	0.050	0.100	0.290	0.189	0.779	0.929	0.120	0.0	2.448
WSW	0.0	0.0	0.140	0.100	0.099	0.120	0.580	0.080	0.0	1.109
W	0.0	0.0	0.100	0.240	0.379	0.720	0.430	0.070	0.020	1.949
WNW	0.0	0.0	0.140	0.190	0.379	0.940	1.119	0.270	0.010	2.638
NW	0.0	0.0	0.140	0.380	0.469	1.299	1.549	0.340	0.0	4.167
NNW	0.0	0.050	0.190	0.190	0.369	1.739	2.718	0.630	0.010	5.886
TOTALS	0.0	0.200	3.248	5.696	6.398	17.039	16.269	4.077	0.090	53.015

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Table 6 (Cont'd)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.050	0.100	0.0	0.120	0.0	0.0	0.0	0.270
NNE	0.0	0.0	0.0	0.100	0.183	0.040	0.0	0.0	0.0	0.320
NE	0.0	0.0	0.100	0.0	0.183	0.700	0.120	0.0	0.0	1.099
ENE	0.0	0.050	0.050	0.190	0.143	0.520	0.040	0.0	0.0	1.033
E	0.0	0.0	0.050	0.240	0.373	0.250	0.0	0.0	0.0	0.909
ESE	0.0	0.0	0.190	0.380	0.403	0.640	0.040	0.0	0.0	1.709
SE	0.0	0.0	0.240	0.430	0.959	2.318	0.859	0.190	0.020	5.017
SSE	0.0	0.0	0.240	0.240	0.143	1.179	1.199	0.400	0.040	3.438
S	0.0	0.0	0.050	0.240	0.463	1.219	0.779	0.190	0.020	2.996
SSW	0.0	0.0	0.240	0.190	0.283	0.829	0.559	0.040	0.010	2.172
SW	0.0	0.0	0.140	0.290	0.463	0.889	0.430	0.140	0.0	2.349
WSW	0.0	0.0	0.0	0.330	0.143	0.330	0.120	0.140	0.0	1.029
W	0.0	0.0	0.140	0.290	0.413	0.210	0.040	0.0	0.0	1.089
WNW	0.0	0.0	0.100	0.0	0.283	0.380	0.040	0.0	0.0	0.799
NW	0.0	0.0	0.050	0.050	0.143	0.370	0.120	0.0	0.0	0.730
NNW	0.0	0.0	0.0	0.0	0.093	0.420	0.120	0.0	0.0	0.630
TOTALS	0.0	0.050	1.639	3.068	4.687	10.453	4.497	1.099	0.090	25.583

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.88	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.130	0.0	0.0	0.0	0.130
ENE	0.0	0.0	0.0	0.090	0.183	0.210	0.040	0.0	0.0	0.480
E	0.0	0.0	0.0	0.140	0.093	0.220	0.040	0.0	0.0	0.490
ESE	0.0	0.0	0.100	0.100	0.283	0.090	0.0	0.0	0.0	0.570
SE	0.0	0.0	0.100	0.140	0.093	0.0	0.080	0.030	0.0	0.440
SSE	0.0	0.050	0.0	0.100	0.233	0.210	0.0	0.0	0.0	0.590
S	0.0	0.0	0.0	0.140	0.373	0.250	0.040	0.0	0.0	0.799
SSW	0.0	0.0	0.0	0.050	0.240	0.250	0.0	0.0	0.0	0.540
SW	0.0	0.0	0.050	0.0	0.043	0.040	0.0	0.0	0.0	0.130
WSW	0.0	0.0	0.050	0.100	0.040	0.040	0.0	0.0	0.0	0.230
W	0.0	0.0	0.0	0.0	0.143	0.090	0.0	0.0	0.0	0.230
WNW	0.0	0.0	0.0	0.050	0.040	0.0	0.0	0.0	0.0	0.090
NW	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.050
NNW	0.0	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.050
TOTALS	0.0	0.050	0.300	0.919	1.789	1.529	0.200	0.030	0.0	4.817

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Table 6 (Cont'd)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.80	4.45	8.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.050
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.100	0.0	0.170	0.0	0.0	0.0	0.270
SSE	0.0	0.0	0.050	0.100	0.090	0.040	0.0	0.0	0.0	0.280
S	0.0	0.0	0.0	0.100	0.0	0.0	0.0	0.0	0.0	0.100
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS	0.0	0.0	0.050	0.300	0.140	0.210	0.0	0.0	0.0	0.700

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Table 7

BFN - Meteorological Data
Split-level Joint Frequency Distribution in Percent
Ground-level Portion

Second Quarter 1982

STABILITY CLASS A

WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED

SECTOR	0.13	0.49	1.10	1.99	2.80	4.49	8.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	0.0	0.0	[illegible]
NNE	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	0.0	[illegible]
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.010	0.070	0.030	0.0	0.0	0.0	0.0	0.110
SSE	0.0	0.0	0.0	[illegible]	[illegible]	0.0	0.0	0.0	0.0	[illegible]
S	0.0	0.0	0.0	0.030	[illegible]	0.0	0.0	0.0	0.0	[illegible]
SSW	0.0	0.0	0.0	0.010	0.010	0.0	0.0	0.0	0.0	0.020
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.010	0.030	0.0	0.0	0.0	0.0	0.040
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
[illegible]	0.0	0.0	0.0	0.0	0.0	0.010	0.020	0.0	0.0	[illegible]
NW	0.0	0.0	0.0	0.0	0.0	[illegible]	0.0	0.0	0.0	[illegible]
[illegible]	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	0.0	0.0	[illegible]
TOTALS	0.0	0.0	0.010	0.170	0.123	0.120	0.120	0.030	0.0	0.571

STABILITY CLASS B

WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED

SECTOR	0.13	0.49	1.10	1.99	2.80	4.49	8.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	0.0	0.0	[illegible]
NNE	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	0.0	0.0	[illegible]
NE	0.0	0.0	0.0	0.0	0.0	[illegible]	0.0	0.0	0.0	[illegible]
ENE	0.0	0.0	0.0	0.0	0.0	[illegible]	0.0	0.0	0.0	[illegible]
E	0.0	0.0	0.0	0.0	0.0	[illegible]	0.0	0.0	0.0	[illegible]
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	[illegible]	0.0	[illegible]	0.0	0.0	0.0	[illegible]
SSE	0.0	0.0	0.0	[illegible]	0.0	[illegible]	[illegible]	0.0	0.0	[illegible]
S	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	[illegible]
SSW	0.0	0.0	0.0	[illegible]	[illegible]	0.0	0.0	0.0	0.0	[illegible]
SW	0.0	0.0	0.0	[illegible]	0.0	0.0	0.0	0.0	0.0	[illegible]
WSW	0.0	0.0	0.0	[illegible]	[illegible]	0.0	0.0	0.0	0.0	[illegible]
W	0.0	0.0	0.0	0.0	[illegible]	0.0	0.0	[illegible]	0.0	[illegible]
WNW	0.0	0.0	0.0	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.0	[illegible]
NW	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	0.0	0.0	[illegible]
NNW	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	0.0	0.0	[illegible]
TOTALS	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]

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Table 7 (Cont'd)

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.86	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.030	0.020	0.0	0.0	0.050
NNE	0.0	0.0	0.0	0.0	0.010	0.020	0.020	0.0	0.0	0.050
NE	0.0	0.0	0.0	0.0	0.0	0.030	0.0	0.0	0.0	0.030
ENE	0.0	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.010
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.010
SE	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.010
SSE	0.0	0.0	0.0	0.0	0.0	0.030	0.0	0.0	0.0	0.030
S	0.0	0.0	0.0	0.010	0.030	0.0	0.0	0.0	0.0	0.040
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.010	0.010	0.010	0.0	0.0	0.0	0.030
W	0.0	0.0	0.0	0.0	0.010	0.030	0.0	0.0	0.0	0.040
WNW	0.0	0.0	0.0	0.0	0.010	0.020	0.0	0.040	0.0	0.070
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.010	0.040	0.0	0.0	0.0	0.050
TOTALS	0.0	0.0	0.0	0.020	0.100	0.220	0.040	0.040	0.0	0.441

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.86	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.010	0.060	0.160	0.040	0.0	0.0	0.270
NNE	0.0	0.0	0.0	0.0	0.030	0.100	0.110	0.040	0.0	0.280
NE	0.0	0.0	0.0	0.0	0.040	0.090	0.0	0.0	0.0	0.130
ENE	0.0	0.0	0.0	0.010	0.040	0.060	0.010	0.0	0.0	0.120
E	0.0	0.0	0.0	0.010	0.020	0.020	0.0	0.0	0.0	0.050
ESE	0.0	0.0	0.0	0.010	0.060	0.0	0.0	0.0	0.0	0.120
SE	0.0	0.0	0.050	0.250	0.180	0.120	0.0	0.0	0.0	0.601
SSE	0.0	0.0	0.030	0.080	0.100	0.090	0.0	0.0	0.0	0.300
S	0.0	0.0	0.030	0.170	0.120	0.180	0.0	0.0	0.0	0.501
SSW	0.0	0.0	0.010	0.100	0.040	0.010	0.0	0.0	0.0	0.160
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.010	0.060	0.130	0.020	0.0	0.0	0.0	0.220
W	0.0	0.0	0.0	0.0	0.100	0.160	0.040	0.050	0.0	0.290
WNW	0.0	0.0	0.0	0.010	0.030	0.110	0.070	0.0	0.0	0.220
NW	0.0	0.0	0.0	0.0	0.0	0.020	0.070	0.050	0.050	0.190
NNW	0.0	0.0	0.0	0.0	0.020	0.070	0.150	0.120	0.0	0.360
TOTALS	0.0	0.0	0.130	0.711	1.051	1.101	0.491	0.280	0.050	3.873

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Table 7 (Cont'd)

STABILITY CLASS E

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.010	0.040	0.090	0.080	0.0	0.0	0.0	0.220
NNE	0.0	0.0	0.010	0.060	0.040	0.070	0.010	0.0	0.0	0.190
NE	0.0	0.0	0.010	0.030	0.060	0.030	0.0	0.0	0.0	0.130
ENE	0.0	0.0	0.020	0.040	0.030	0.010	0.0	0.0	0.0	0.100
E	0.0	0.0	0.010	0.030	0.010	0.0	0.0	0.0	0.0	0.050
ESE	0.0	0.0	0.020	0.030	0.010	0.0	0.0	0.0	0.0	0.060
SE	0.0	0.010	0.110	0.130	0.100	0.0	0.0	0.0	0.0	0.350
SSE	0.0	0.0	0.100	0.100	0.040	0.0	0.0	0.0	0.0	0.300
S	0.0	0.0	0.040	0.050	0.110	0.210	0.190	0.0	0.0	0.641
SSW	0.0	0.0	0.010	0.010	0.010	0.080	0.0	0.0	0.0	0.110
SW	0.0	0.0	0.0	0.010	0.010	0.0	0.0	0.0	0.0	0.020
WSW	0.0	0.0	0.010	0.040	0.010	0.020	0.030	0.0	0.0	0.130
W	0.0	0.0	0.010	0.050	0.040	0.010	0.030	0.0	0.0	0.140
WNW	0.0	0.0	0.0	0.0	0.030	0.010	0.0	0.0	0.0	0.040
NW	0.0	0.0	0.0	0.0	0.010	0.010	0.010	0.0	0.0	0.030
NNW	0.0	0.0	0.0	0.030	0.040	0.070	0.030	0.0	0.0	0.170
TOTALS	0.0	0.010	0.400	0.711	0.641	0.601	0.320	0.0	0.0	2.083

STABILITY CLASS F

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.030	0.060	0.020	0.0	0.0	0.0	0.0	0.110
NNE	0.0	0.0	0.040	0.120	0.080	0.010	0.0	0.0	0.0	0.250
NE	0.0	0.0	0.020	0.040	0.010	0.010	0.0	0.0	0.0	0.080
ENE	0.0	0.010	0.010	0.020	0.010	0.0	0.0	0.0	0.0	0.050
E	0.0	0.0	0.020	0.030	0.0	0.0	0.0	0.0	0.0	0.050
ESE	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010
SE	0.0	0.0	0.050	0.010	0.030	0.0	0.0	0.0	0.0	0.090
SSE	0.0	0.010	0.020	0.020	0.030	0.0	0.0	0.0	0.0	0.080
S	0.0	0.0	0.010	0.010	0.030	0.080	0.090	0.0	0.0	0.220
SSW	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.010
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.020	0.010	0.0	0.0	0.0	0.0	0.030
TOTALS	0.0	0.040	0.210	0.330	0.240	0.080	0.090	0.0	0.0	0.991

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Table 7 (Cont'd)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.80	4.48	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.020	0.040	0.020	0.0	0.0	0.0	0.0	0.080
NNE	0.0	0.0	0.020	0.110	0.040	0.0	0.0	0.0	0.0	0.170
NE	0.0	0.0	0.010	0.010	0.0	0.0	0.0	0.0	0.0	0.020
ENE	0.0	0.0	0.010	0.010	0.010	0.0	0.0	0.0	0.0	0.030
E	0.004	0.010	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.024
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.010
SSE	0.0	0.0	0.020	0.020	0.0	0.0	0.0	0.0	0.0	0.040
S	0.0	0.0	0.0	0.030	0.0	0.0	0.0	0.0	0.0	0.030
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS	0.004	0.010	0.090	0.280	0.070	0.0	0.0	0.0	0.0	0.404

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Table 7 (Cont'd)
Elevated Portion of Split-level JFD

STABILITY CLASS A

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.39	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

STABILITY CLASS B

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.39	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.0	0.0	0.040
ESE	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.0	0.0	0.040
SE	0.0	0.0	0.090	0.0	0.0	0.0	0.0	0.0	0.0	0.090
SSE	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
S	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
SSW	0.0	0.0	0.050	0.0	0.0	0.120	0.0	0.0	0.0	0.170
SW	0.0	0.0	0.0	0.050	0.0	0.130	0.0	0.0	0.0	0.180
WSW	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.0	0.0	0.040
W	0.0	0.0	0.0	0.0	0.0	0.080	0.0	0.0	0.0	0.080
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS	0.0	0.0	0.240	0.050	0.0	0.451	0.0	0.0	0.0	0.741

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Table 7 (Cont'd)

STABILITY CLASS C

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.0	0.0	0.040
NNE	0.0	0.0	0.0	0.0	0.050	0.040	0.0	0.0	0.0	0.090
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.080	0.040	0.0	0.0	0.120
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.050	0.0	0.090	0.0	0.0	0.0	0.140
SE	0.0	0.0	0.190	0.330	0.050	0.0	0.0	0.0	0.0	0.571
SSE	0.0	0.0	0.140	0.330	0.040	0.0	0.0	0.0	0.0	0.511
S	0.0	0.0	0.050	0.140	0.050	0.040	0.0	0.0	0.0	0.280
SSW	0.0	0.0	0.0	0.190	0.050	0.170	0.0	0.0	0.0	0.410
SW	0.0	0.0	0.050	0.330	0.090	0.170	0.0	0.0	0.0	0.641
WSW	0.0	0.0	0.0	0.090	0.140	0.170	0.0	0.0	0.0	0.400
W	0.0	0.0	0.0	0.050	0.270	0.330	0.0	0.0	0.0	0.651
WNW	0.0	0.0	0.0	0.0	0.0	0.040	0.040	0.0	0.010	0.090
NW	0.0	0.0	0.0	0.0	0.050	0.0	0.040	0.0	0.0	0.090
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.0	0.040
TOTALS	0.0	0.0	0.431	1.512	0.791	1.171	0.160	0.0	0.010	4.075

STABILITY CLASS D

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.80	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.471	0.631	1.952	1.241	0.090	0.0	4.385
NNE	0.0	0.050	0.090	0.190	0.410	1.081	0.581	0.310	0.010	2.723
NE	0.0	0.0	0.140	0.190	0.370	1.171	0.120	0.0	0.0	1.992
ENE	0.0	0.0	0.090	0.190	0.270	0.751	0.110	0.0	0.0	1.412
E	0.0	0.0	0.140	0.280	0.280	0.210	0.190	0.0	0.0	1.101
ESE	0.0	0.0	0.380	0.471	0.140	0.751	0.120	0.0	0.0	1.862
SE	0.0	0.0	0.571	1.662	1.692	2.463	0.781	0.180	0.0	7.349
SSE	0.0	0.050	0.471	1.061	1.191	1.632	0.891	0.481	0.010	5.767
S	0.0	0.0	0.280	0.761	0.951	1.622	1.352	0.341	0.010	5.317
SSW	0.0	0.050	0.280	0.621	0.370	1.372	0.961	0.020	0.0	3.674
SW	0.0	0.0	0.380	0.661	1.111	1.101	0.040	0.0	0.0	3.394
WSW	0.0	0.0	0.521	0.471	0.325	0.380	0.0	0.050	0.0	1.742
W	0.0	0.0	0.140	0.521	0.551	0.801	0.040	0.020	0.010	2.083
WNW	0.0	0.0	0.190	0.090	0.410	0.711	0.501	0.170	0.0	2.072
NW	0.0	0.050	0.050	0.090	0.050	0.451	0.390	0.060	0.0	1.101
NNW	0.0	0.0	0.190	0.240	0.310	1.241	0.701	0.140	0.020	2.843
TOTALS	0.0	0.200	3.915	7.909	9.061	17.791	8.020	2.062	0.060	48.979

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Table 7 (Cont'd)

STABILITY CLASS E

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.83	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.090	0.240	0.731	0.711	0.0	0.0	0.0	1.772
NNE	0.0	0.0	0.280	0.240	0.090	1.392	0.040	0.0	0.0	2.042
NE	0.0	0.0	0.050	0.140	0.140	0.721	0.120	0.0	0.0	1.221
ENE	0.0	0.050	0.240	0.190	0.180	0.511	0.080	0.0	0.0	1.251
E	0.0	0.050	0.190	0.471	0.410	0.260	0.0	0.0	0.0	1.382
ESE	0.0	0.0	0.380	0.621	0.651	0.380	0.0	0.0	0.0	2.032
SE	0.0	0.0	0.711	1.091	1.562	0.691	0.190	0.020	0.0	4.205
SSE	0.0	0.0	0.280	0.811	0.691	0.951	0.661	0.030	0.0	3.424
S	0.0	0.0	0.240	0.521	0.501	0.581	0.270	0.110	0.0	2.223
SSW	0.0	0.0	0.280	0.280	0.230	0.210	0.040	0.0	0.0	1.041
SW	0.0	0.0	0.230	0.431	0.090	0.0	0.040	0.0	0.0	0.841
WSW	0.0	0.0	0.050	0.090	0.190	0.210	0.0	0.030	0.0	0.571
W	0.0	0.0	0.080	0.521	0.280	0.421	0.080	0.0	0.0	1.352
WNW	0.0	0.0	0.0	0.090	0.180	0.340	0.0	0.0	0.0	0.611
NW	0.0	0.0	0.090	0.0	0.130	0.080	0.040	0.0	0.0	0.340
NNW	0.0	0.0	0.140	0.0	0.0	0.290	0.0	0.030	0.0	0.461
TOTALS	0.0	0.100	3.354	5.787	6.057	7.689	1.582	0.220	0.0	24.770

STABILITY CLASS F

	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
SECTOR	0.13	0.45	1.10	1.99	2.83	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.0	0.0	0.090	0.541	0.0	0.0	0.0	0.631
NNE	0.0	0.0	0.0	0.090	0.040	0.791	0.160	0.0	0.0	1.071
NE	0.0	0.0	0.090	0.140	0.230	0.531	0.120	0.0	0.0	1.111
ENE	0.0	0.0	0.0	0.090	0.370	0.210	0.120	0.0	0.0	0.791
E	0.0	0.0	0.050	0.050	0.050	0.250	0.040	0.0	0.0	0.441
ESE	0.0	0.0	0.240	0.571	0.461	0.040	0.0	0.0	0.0	1.312
SE	0.0	0.0	0.190	0.431	0.410	0.040	0.0	0.0	0.0	1.071
SSE	0.0	0.0	0.050	0.140	0.090	0.080	0.0	0.0	0.0	0.360
S	0.0	0.0	0.050	0.190	0.140	0.210	0.0	0.0	0.0	0.591
SSW	0.0	0.0	0.050	0.280	0.090	0.130	0.0	0.0	0.0	0.551
SW	0.0	0.0	0.140	0.050	0.180	0.040	0.0	0.0	0.0	0.410
WSW	0.0	0.0	0.050	0.0	0.090	0.130	0.0	0.0	0.0	0.270
W	0.0	0.0	0.0	0.050	0.090	0.0	0.0	0.0	0.0	0.140
WNW	0.0	0.0	0.0	0.0	0.0	0.040	0.0	0.0	0.0	0.040
NW	0.0	0.0	0.0	0.090	0.0	0.0	0.0	0.0	0.0	0.090
NNW	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
TOTALS	0.0	0.0	0.961	2.173	2.333	3.024	0.441	0.0	0.0	8.931

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Table 7 (Cont'd)

STABILITY CLASS G

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED									
	0.13	0.45	1.10	1.99	2.85	4.48	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.050	0.0	0.0	0.040	0.040	0.0	0.0	0.130
NNE	0.0	0.0	0.140	0.050	0.050	0.370	0.200	0.0	0.0	0.811
NE	0.0	0.0	0.050	0.0	0.090	0.160	0.040	0.0	0.0	0.340
ENE	0.0	0.0	0.0	0.050	0.0	0.170	0.0	0.0	0.0	0.220
E	0.0	0.0	0.0	0.0	0.0	0.000	0.0	0.0	0.0	0.000
ESE	0.0	0.050	0.090	0.0	0.0	0.0	0.0	0.0	0.0	0.140
SE	0.0	0.0	0.090	0.190	0.050	0.0	0.0	0.0	0.0	0.330
SSE	0.0	0.0	0.140	0.050	0.0	0.0	0.0	0.0	0.0	0.190
S	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
SSW	0.0	0.0	0.0	0.050	0.090	0.0	0.0	0.0	0.0	0.140
SW	0.0	0.090	0.0	0.0	0.090	0.0	0.0	0.0	0.0	0.180
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.050
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.090	0.0	0.0	0.0	0.0	0.0	0.0	0.090
TOTALS	0.0	0.140	0.751	0.390	0.379	0.821	0.280	0.0	0.0	2.753

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Table 8

BFN - Meteorological Data
Elevated Joint Frequency Distribution in Percent

First Quarter 1982

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.85	4.45	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.390	0.580	0.490	2.480	3.200	1.600	0.190	8.931
NNE	0.011	0.100	0.440	0.150	0.780	2.620	1.650	0.970	0.0	6.722
NE	0.005	0.050	0.340	0.240	0.780	1.890	1.840	0.390	0.0	5.536
ENE	0.0	0.0	0.150	0.240	0.150	0.730	0.680	0.240	0.0	2.190
E	0.005	0.050	0.050	0.240	0.440	1.410	0.780	0.0	0.0	2.975
ESE	0.005	0.050	0.190	0.340	0.870	1.840	1.840	0.580	0.0	5.710
SE	0.0	0.0	0.390	0.490	0.530	1.700	3.250	1.890	1.170	9.421
SSE	0.011	0.100	0.100	0.290	0.190	1.390	2.910	1.990	1.410	8.242
S	0.0	0.0	0.240	0.390	0.390	2.380	2.770	2.720	0.530	9.421
SSW	0.005	0.050	0.050	0.390	0.150	1.460	2.570	1.600	0.440	6.716
SW	0.005	0.050	0.190	0.150	0.580	1.020	3.300	0.920	0.190	6.406
WSW	0.0	0.0	0.240	0.240	0.340	1.310	1.020	0.490	0.440	4.081
W	0.0	0.0	0.240	0.340	0.530	1.460	1.360	0.390	0.390	4.711
WNW	0.0	0.0	0.240	0.100	0.390	1.300	1.170	0.920	0.290	4.411
NW	0.0	0.0	0.390	0.580	0.240	1.500	1.750	1.310	0.190	5.961
NNW	0.0	0.0	0.150	0.190	0.190	1.890	3.640	1.890	0.290	8.241
TOTALS	0.047	0.450	3.791	4.981	7.041	28.554	33.735	17.902	5.531	100.001

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Table 9

BFN - Meteorological Data
Elevated Joint Frequency Distribution in Percent

Second Quarter 1982

STABILITY CLASS D

SECTOR	WIND SPEEDS IN METERS PER SECOND FROM THE SECTORS INDICATED 0.13	0.45	1.10	1.99	2.80	4.48	6.91	9.59	13.00	TOTALS
N	0.0	0.0	0.190	0.330	0.670	2.810	2.900	0.570	0.050	7.520
NNE	0.0	0.050	0.330	0.190	0.380	1.230	2.430	0.620	0.050	5.000
NE	0.0	0.050	0.240	0.480	0.240	1.950	2.430	0.810	0.050	6.250
ENE	0.0	0.0	0.240	0.380	0.380	1.270	1.190	0.380	0.050	4.190
E	0.0	0.050	0.290	0.430	0.620	0.870	0.480	0.050	0.0	2.490
ESE	0.0	0.0	0.380	0.810	0.900	1.670	1.870	0.330	0.050	5.710
SE	0.0	0.0	0.330	1.620	1.710	3.710	2.000	1.240	0.380	10.990
SSE	0.0	0.100	0.670	1.430	1.860	3.860	2.050	0.290	0.140	11.000
S	0.0	0.0	0.380	0.980	1.240	3.140	2.760	1.700	0.240	10.470
SSW	0.0	0.0	0.570	0.860	0.710	2.700	2.290	0.810	0.140	8.140
SW	0.0	0.0	0.520	0.860	0.810	2.670	1.950	0.190	0.050	7.050
WSW	0.0	0.0	0.430	0.760	0.520	1.050	0.760	0.050	0.140	3.710
W	0.0	0.0	0.190	1.190	1.100	1.900	0.140	0.050	0.330	4.900
WNW	0.0	0.0	0.430	0.330	0.620	1.860	1.290	0.330	0.140	5.000
NW	0.0	0.0	0.140	0.190	0.240	0.860	0.520	0.330	0.240	2.520
NNW	0.0	0.050	0.140	0.290	0.240	1.570	1.190	0.330	0.190	4.000
TOTALS	0.0	0.300	5.470	11.100	12.240	33.900	25.950	8.800	2.240	100.001

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Table 10

Browns Ferry Nuclear Plant - Individual Doses from Gaseous Effluents First Quarter 1982

Effluent	Pathway	Guideline*	Point	Dose
Noble gases	γ air dose	30	max. exp.[1]	0.11 mrad
	β air dose	60	max. exp.[1]	0.16 mrad
	total body[2]	15	residence[3]	0.07 mrem
	skin[2]	45	residence[3]	0.09 mrem
Iodines/ Particulates				
	Bone (critical organ)	45	real pathway[4]	0.13 mrem

Breakdown of Iodine/Particulate Exposures (mrem)

	Child	Adult
Vegetable Ingestion	1.18×10^{-1}	5.04×10^{-2}
Beef Ingestion[5]	7.64×10^{-4}	5.94×10^{-4}
Inhalation	7.32×10^{-4}	3.24×10^{-4}
Ground Contamination	1.07×10^{-2}	1.07×10^{-2}
Total	0.13	0.06

*The annual guidelines are defined by appendix I to 10 CFR 50.

1. Location is 5300 meters in the NW sector.
2. Dose from air submersion.
3. Location is 7500 meters in the N sector.
4. Location is 1740 meters in the N sector.
5. Location is 1620 meters in the NNW sector.

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Table 11

Browns Ferry Nuclear Plant - Individual Doses from Gaseous Effluents
Second Quarter 1982

Effluent	Pathway	Guideline*	Point	Dose
Noble gases	T air dose	30	max. exp.[1]	0.33 mrad
	β air dose	60	max. exp.[1]	0.52 mrad
	total body[2]	15	residence[3]	0.17 mrem
	skin[2]	45	residence[3]	0.23 mrem
Iodines/ Particulates				
	Bone (critical organ)	45	real pathway[4]	0.11 mrem

Breakdown of Iodine/Particulate Exposures (mrem)

	Child	Adult
Vegetable Ingestion	7.02×10^{-2}	2.28×10^{-2}
Beef Ingestion[5]	1.74×10^{-3}	1.19×10^{-3}
Inhalation	3.38×10^{-3}	1.23×10^{-3}
Ground Contamination	3.36×10^{-2}	3.36×10^{-2}
Total	0.11	0.06

*The annual guidelines are defined by appendix I to 10 CFR 50.

1. Location is at 4900 meters in the NW sector.
2. Dose from air submersion.
3. Location is at 7500 meters in the N sector.
4. Location is at 1620 meters in the NNW sector.
5. Location is at 1550 meters in the N sector.

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Table 12

Gaseous Effluent Doses - Population

First Quarter 1982

	THYROID					TOTAL BODY				
	INFANT	CHILD	TEEN	ADULT	TOTALS	INFANT	CHILD	TEEN	ADULT	TOTALS
SUBMERSION	5.05E-02	3.14E-01	2.00E-01	9.27E-01	1.49E 00	5.05E-02	3.14E-01	2.00E-01	9.27E-01	1.49E 00
GROUND	2.23E-03	1.39E-02	8.83E-03	4.09E-02	6.59E-02	2.23E-03	1.39E-02	8.83E-03	4.09E-02	6.59E-02
INHALATION	1.08E-03	1.09E-02	4.20E-03	1.60E-02	3.22E-02	1.53E-03	1.82E-02	5.84E-03	1.95E-02	4.51E-02
COW MILK	8.49E-02	2.18E-01	5.79E-02	2.19E-01	5.80E-01	2.02E-04	8.85E-04	3.48E-04	1.71E-03	3.14E-03
BEEF INGESTION	0.0	2.77E-03	1.18E-03	7.17E-03	1.11E-02	0.0	1.27E-04	1.02E-04	9.19E-04	1.15E-03
VEG INGESTION	0.0	2.78E-02	1.20E-02	6.89E-02	1.09E-01	0.0	3.55E-04	1.98E-04	1.38E-03	1.93E-03
TOTAL MAN-REM	1.39E-01	5.88E-01	2.84E-01	1.28E 00	2.29E 00	5.44E-02	3.48E-01	2.15E-01	9.92E-01	1.61E 00

Second Quarter 1982

	THYROID					TOTAL BODY				
	INFANT	CHILD	TEEN	ADULT	TOTALS	INFANT	CHILD	TEEN	ADULT	TOTALS
SUBMERSION	9.07E-02	5.66E-01	3.60E-01	1.67E 00	2.68E 00	9.07E-02	5.66E-01	3.60E-01	1.67E 00	2.68E 00
GROUND	3.11E-03	1.94E-02	1.23E-02	5.71E-02	9.19E-02	3.11E-03	1.94E-02	1.23E-02	5.71E-02	9.19E-02
INHALATION	7.48E-04	7.82E-03	3.00E-03	1.15E-02	2.31E-02	2.78E-03	3.31E-02	1.07E-02	3.60E-02	8.25E-02
COW MILK	3.31E-02	8.52E-02	2.27E-02	8.60E-02	2.27E-01	2.91E-04	1.35E-03	6.12E-04	3.29E-03	5.55E-03
BEEF INGESTION	0.0	9.82E-04	4.25E-04	2.66E-03	4.06E-03	0.0	2.96E-04	2.17E-04	1.89E-03	2.40E-03
VEG INGESTION	0.0	6.09E-03	3.91E-03	2.26E-02	3.56E-02	0.0	2.52E-04	1.69E-04	1.33E-03	1.75E-03
TOTAL MAN-REM	1.28E-01	6.68E-01	4.02E-01	1.85E 00	3.07E 00	9.69E-02	6.20E-01	3.84E-01	1.77E 00	2.87E 00

Table 13

Liquid Effluent Doses
Browns Ferry Nuclear Plant Routine Releases

First Quarter 1982

	BONE	GI TRACT	THYROID	TOTAL BODY	LIVER	SKIN
I. WATER INGESTION						
A. MAXIMUM INDIVIDUAL DOSE (MREM) U.S. PLYWOOD-CHAMPION PAPER	1.1E-03	3.9E-03	7.3E-03	1.2E-03	1.5E-03	1.2E-03
B. TOTAL POPULATION DOSE (MAN-REM) TENNESSEE RIVER	9.7E-03	3.2E-02	3.6E-02	1.0E-02	1.3E-02	1.0E-02
II. FISH CONSUMPTION						
A. MAXIMUM INDIVIDUAL DOSE (MREM) WHEELER LAKE BELOW BFN	3.5E-02	3.3E-02	5.4E-02	4.5E-02	6.8E-02	4.5E-02
B. TOTAL POPULATION DOSE (MAN-REM) TENNESSEE RIVER	2.8E+00	2.7E+00	4.2E+00	3.6E+00	5.5E+00	3.6E+00

III. RECREATION	IN-WATER		ABOVE-WATER		SHORELINE	
	TOTAL BODY	SKIN	TOTAL BODY	SKIN	TOTAL BODY	SKIN
A. MAXIMUM INDIVIDUAL DOSE (MREM) WHEELER LAKE BELOW BFN	1.7E-05	3.1E-04	1.7E-05	3.0E-04	6.4E-02	7.6E-02
B. TOTAL POPULATION DOSE (MAN-REM) TENNESSEE RIVER	1.7E-05	5.6E-04	4.4E-05	1.5E-03	3.8E-01	4.4E-01

IV. TOTAL	BONE	GI TRACT	THYROID	TOTAL BODY	LIVER	SKIN
A. MAXIMUM INDIVIDUAL DOSE (MREM)	1.0E-01	1.0E-01	1.3E-01	1.1E-01	1.3E-01	1.2E-01
B. POPULATION DOSE (MAN-REM) TENNESSEE RIVER	3.2E+00	3.1E+00	4.6E+00	4.0E+00	5.9E+00	4.1E+00

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Table 14

Liquid Effluent Doses
Browns Ferry Nuclear Plant Routine Releases

Second Quarter 1982

	BONE	GI TRACT	THYROID	TOTAL BODY	LIVER	SKIN
I. WATER INGESTION						
A. MAXIMUM INDIVIDUAL DOSE (MREM) U.S. PLYWOOD-CHAMPION PAPER	8.0E-04	5.5E-04	1.6E-03	6.7E-04	9.2E-04	6.7E-04
B. TOTAL POPULATION DOSE (MAN-REM) TENNESSEE RIVER	6.5E-03	4.0E-03	6.8E-03	5.5E-03	7.6E-03	5.5E-03
II. FISH CONSUMPTION						
A. MAXIMUM INDIVIDUAL DOSE (MREM) WHEELER LAKE BELOW BFN	2.6E-02	1.0E-02	3.4E-02	3.2E-02	4.7E-02	3.2E-02
B. TOTAL POPULATION DOSE (MAN-REM) TENNESSEE RIVER	2.0E+00	7.8E-01	2.6E+00	2.5E+00	3.6E+00	2.5E+00

III. RECREATION	IN-WATER		ABOVE-WATER		SHORELINE	
	TOTAL BODY	SKIN	TOTAL BODY	SKIN	TOTAL BODY	SKIN
A. MAXIMUM INDIVIDUAL DOSE (MREM) WHEELER LAKE BELOW BFN	7.5E-06	1.2E-04	7.4E-06	1.2E-04	2.4E-02	2.8E-02
B. TOTAL POPULATION DOSE (MAN-REM) TENNESSEE RIVER	8.6E-06	2.0E-04	2.2E-05	5.2E-04	1.3E-01	1.6E-01

IV. TOTAL	BONE	GI TRACT	THYROID	TOTAL BODY	LIVER	SKIN
A. MAXIMUM INDIVIDUAL DOSE (MREM)	5.0E-02	3.4E-02	5.9E-02	5.7E-02	7.1E-02	6.1E-02
B. POPULATION DOSE (MAN-REM) TENNESSEE RIVER	2.1E+00	9.1E-01	2.7E+00	2.7E+00	3.8E+00	2.7E+00

Table 15

Browns Ferry Nuclear Plant - Five-Year Summary
of Quarterly Doses*

Year	Quarter	Air-T (mrad)	Air-β (mrad)	Air Submersion Skin (mrem)	Air Submersion Total Body (mrem)	Real Pathway Maximum Organ (mrem)	Liquid Effluents Total Body (mrem)	Liquid Effluents Maximum Organ (mrem)
1977	3	.99	5.42	2.02	.55	.11 Thyr.	.02	.03 GI Tract
	4	.52	2.63	1.10	.39	.10 Thyr.	.02	.05 GI Tract
1978	1	.18	1.02	.38	.10	.06 Thyr.	.01	.04 GI Tract
	2	1.66	10.10	3.79	.98	.15 Thyr.	.02	.07 GI Tract
	3	1.41	13.20	4.60	.89	.17 Thyr.	.04	.08 GI Tract
	4	.43	4.16	1.42	.26	.08 Thyr.	.08	.27 GI Tract
1979	1	1.44	5.01	2.24	.89	.10 Thyr.	.02	.13 GI Tract
	2	.79	7.00	2.49	.51	.09 Thyr.	.02	.07 GI Tract
	3	1.94	12.90	4.36	1.19	.26 Thyr.	.04	.04 Thyr.
	4	2.25	16.00	5.65	1.27	.14 Thyr.	.06	.06 Thyr.
1980	1[a]	.35	.44	.31	.21	.11 Thyr.	.05	.03 Thyr.
	2	.39	.48	.33	.22	1.19 Bone	.03	.01 Thyr.
	3[b]	.40	.52	.31	.21	.07 Thyr.	.09	.11 Liver
	4	.93	1.09	.64	.45	.08 Thyr.	.15	.19 Liver
1981	1	1.97	2.11	1.40	.96	.09 Bone	.07	.10 Liver
	2	.28	.35	.23	.15	.98 Bone	.21	.25 Liver
	3	.15	.19	.11	.07	.14 Bone	.23	.28 Liver
	4	.09	.12	.09	.06	.08 Thyr.	.05	.06 Liver
1982	1	.11	.16	.09	.07	.13 Bone	.11	.13 Liver
	2	.33	.52	.23	.17	.11 Bone	.06	.07 Liver

[a] Plant procedures were revised in early 1980 for determining more realistically Kr-85 releases via the plant gaseous effluent release points.

[b] Prior to the third quarter of 1980 the liver was not considered in liquid dose analyses.

*Note: All calculated doses are below limits specified in Appendix I to 10 CFR 50.

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